DECISION MEMO
South Brushy Fork Non-System Road Decommissioning

USDA Forest Service, Northern Region
Nez Perce-Clearwater National Forests
Lochsa-Powell Ranger District
Idaho County, Idaho

I. Background

The Lochsa-Powell District Ranger in partnership with the Nez Perce Tribe, proposes to approve decommissioning and recontouring up to eight miles of non-system, harvest legacy roads in the Nez-Perce-Clearwater National Forests, Idaho County, Idaho. The project area is located in T37N, R15E, Section 16, Boise Meridian. (See attached map).

The category for this project is: 36 CFR 220.6(e)(20): *Activities that restore, rehabilitate, or stabilize lands occupied by roads and trails, excluding National Forest System roads and National Forest System trails to a more natural condition that may include removing, replacing, or modifying drainage structures and ditches, reestablishing vegetation, reshaping natural contours and slopes, reestablishing drainage-ways, or other activities that would restore site productivity and reduce environmental impacts.*

II. Purpose and Need

The Purpose of the Action is to decommission and rehabilitate roads determined no longer necessary for the Forest's transportation system (see attached map). The Action is needed to reduce impacts to the watershed from sediment movement into streams due to severe erosion associated with the non-system roads at failing stream crossings. Additionally, most of the roads identified for decommissioning are on dissected stream breakland land types, while some are on mass wasting land types, both of which are subject to landslides. During the floods of winter 1995-1996, many similar roadbeds failed, and the associated landslides delivered large amounts of sediment to area streams. In the absence of management, these roads will continue to be a source of chronic erosion and also have a high potential for landslide failure.

Decommissioning and restoring non-system roads to their desired ecological conditions will help meet Clearwater National Forest Plan (Forest Plan) objectives and management direction for transportation, wildlife and fish habitat, soil productivity, water quality, and protecting and improving watershed, wetland, and riparian resources.

Forestwide management direction related to the project can be found on pages II-5 and II-24 of the Forest Plan (USDA Forest Service, 1987):

Forest Plan Objective

Wildlife and Fish - Restore selected, presently degraded fish habitat through habitat improvement projects designed to achieve stated objectives (See Water Quality Standards and Management Area M2).

Forest Plan Standard

Wildlife and Fish - Cooperate with Idaho Fish and Game, Indian tribes, and other agencies in the management of wildlife and fish habitat.

The Project is located in Management Areas (MA), E1 (Timber Management) and M2 (Riparian Area). The following management direction for MA E1 (Forest Plan, p. III-57 to III-59) and M2 (Forest Plan, pp. III-68 to III-73) apply to this project:

Management Area E1

Goals - Provide optimum, sustained production of wood products....Manage a range of water quality and fish habitat potential from high fishable in several of the key anadromous and resident fish streams…

Water and Soil Standard – Utilize best management practices and meet water quality standards as defined in the Forestwide standards and Appendix K.

Management Area M2

Goal - Manage under the principles of multiple use as areas of special consideration, distinctive values, and integrated with adjacent management areas to the extent that water and other riparian dependent resources are protected.

Water and Soil Goals – Conduct watershed and stream improvements that will: 1) Enhance riparian and water resources; 2) Rehabilitate and/or mitigate the adverse effects of fire, flood, and other natural or management related causes.

Water and Soil Standard – Meet Forestwide water quality standards.

Decision

I have decided to approve the South Brushy Fork Non-System Road Decommissioning Project with the following terms and conditions:

Using heavy equipment, a contractor would clear the roads of vegetation, then decompact the road surfaces, and recontour the roads by pulling up the fill slopes and re-shaping the ground close to original contours. In addition, the operator would clump plant native vegetation on the recontoured slopes, and pull duff and organic material from the adjacent up-hill side to enhance revegetation.

Where the roads cross streams, the operator would remove the existing culverts (log or corrugated metal pipe), re-establish the grade of the stream, and if necessary, construct grade control structures in the stream bed to mimic a typical step-pool system. In areas where the sub-surface flow has been interrupted and has caused ponding, the contractor would excavate a shallow depression to ensure drainage, and would use the excavator to plant vegetation perpendicular to the flow to help re-establish sub-surface flow. It is common practice to scatter the removed vegetation (slash) on the recontoured surface to help limit erosion and provide micro-sites for re-vegetation.

Road decommissioning uses a variety of BMPs including those for invasive plant management (equipment cleaning and inspection), and water quality, which may include erosion control

measures and native plant re-vegetation. BMPs would be applied to maintain slope stability, and minimize soil disturbance from road decommissioning work. Many of these are derived from site specific best management practices (BMPs) from the Idaho Forest Practices Act and Stream Channel Alteration Handbook.

Mechanical support would follow BMPs for fuel storage and machine fueling to minimize the risk of a fuels spill into live water. The contractor would have fuel spill containment supplies onsite in the event of a fuel spill and their employees would be trained in the proper application and use of those materials.

Any required permits for disturbance of water or wetlands would be obtained prior to initiating work (Army Corps of Engineers 404 permit, Idaho Department of Water Resources Stream Alteration Permit). Any mitigation measures identified in the permitting process would be incorporated into the project plans.

Access to the project area would be via Forest Road 5669.

Design Criteria and Mitigation Measures

The project includes the design criteria identified below. These are not all-inclusive, as the Forest Plan standards are incorporated by reference (USDA Forest Service 1987, as amended). Road treatments would include the following design features and mitigation measures:

- Any hardened road segment or surface area shall be de-compacted to promote water infiltration and establish vegetation.
- After required decompaction of the roadway, the fill material shall be pulled up and placed on the roadbed between the top of cutslope and original ground forming a slope approximating natural contours. No ditches, water traps, or berms shall remain, nor any structures that require maintenance.
- Log or metal culverts, other drainage structures and associated fills shall be removed from stream channels, followed by restoring channels to natural grade and sideslope contour.
- Vegetation shall be preserved and placed on top of re-contoured road segments and completed channel side slopes in stable positions not interfering with stream channel flow.
- Roughness and diversity elements shall be added at culvert removal sites, such as rock or log weirs, rootwads and live plant transplants to dissipate energy and support channel grade and bank stability in the newly restored stream channels.
- All seeps and springs encountered shall have drainage channels or swales provided.
- Clumps of available vegetation and associated soil shall be transplanted onto disturbed areas for erosion protection and long-term site productivity.
- The disturbed area shall be 40% to 60% covered with natural slash when available from roadway.
- Decommissioning activities shall be coordinated to avoid impacting fish spawning windows and locations.
- A narrow (2' wide) break in slash and woody debris would remain at the top edge of the decommissioned road to accommodate foot and wildlife traffic.
- At completion, the decommissioned roads would no longer require maintenance and would not be accessible to motorized vehicles.

The following design features would be used to minimize sediment delivery and other impacts to streams during culvert removal and road decommissioning. These measures may include any combination of the following:

- Work during wet conditions shall cease if rutting and erosion cannot be controlled. Prior to leaving the site, any rutted areas and other damaged areas shall be smoothed, sloped and graded to drain, and all erosion control features shall be constructed and functional.
- When working adjacent to live water or streams a buffer of vegetation, a brush barrier, or straw dike would be maintained to prevent direct sedimentation to the stream.
- Stream diversions or dewatering would be required while work is being done in the channel. Settling basins or other methods would be used to ensure that muddy water does not return to the stream. Diversions would be installed, operated and removed such that erosion and sedimentation is minimized.
- Fill material would be placed in stable areas outside of stream channels and floodplains.
- The contractor would dispose of removed culverts and other structural materials off National Forest System land.
- Prior to arriving at the project site, equipment used for instream work shall be cleaned of external oil, grease, dirt, mud, plant parts, and any leaks would be repaired. This cleaning would remove all dirt and plant parts to ensure that noxious weeds and aquatic invasive species are not brought to the site. All equipment would be inspected by the COR before unloading at site. Equipment would be inspected daily for leaks or accumulations of grease, and identified problems corrected before entering streams or areas that drain directly to streams or wetlands.
- Mechanical support would follow BMPs for fuel storage and machine fueling to minimize the risk of a fuels spill into live water. The contractor would have fuel spill containment supplies onsite in the event of a fuel spill and their employees would be trained in the proper application and use of those materials.

III. Rationale for Decision and Reasons for Categorically Excluding the Decision

A. Category of Exclusion and Rationale for Using the Category

Based on information in this document and the project record, I have determined that no extraordinary circumstances affecting resource conditions exist (36 CFR 220.6), that this project may be categorically excluded from documentation in an EA or EIS, and that it meets all the criteria outlined for 36 CFR 220.6(e)(20): *Activities that restore, rehabilitate, or stabilize lands occupied by roads and trails, excluding National Forest System roads and National Forest System trails, to a more natural condition that may include removing, replacing, or modifying drainage structures and ditches, reestablishing vegetation, reshaping natural contours and slopes, reestablishing drainage-ways, or other activities that would restore site productivity and reduce environmental impacts.*

The rationale for my decision is based on: (1) the proposed action fully meeting the criteria for Categorical Exclusions, (2) the proposed action meeting the purpose and need, (3) the findings related to extraordinary circumstances, discussed below, (4) the project's consistency with laws and regulations, including the Forest Plan, and (5) my review of the Biological Assessments (BA), Biological Evaluations (BE), specialists' reports, and project record.

B. Finding of the Absence of Adverse Effects to Extraordinary Circumstances

Based on the findings for resource conditions described below, I have determined that no extraordinary circumstances are associated with my decision. Forest Service direction at 36 CFR 220.6(b) describes the resource conditions that should be considered in determining whether extraordinary circumstance related to the proposed action warrant further analysis and documentation in an EIS or EA.

Additionally, 36 CFR 220.6(b) states, "The mere presence of one of more of these resource conditions does not preclude use of a categorical exclusion. It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist."

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat or Forest Service sensitive species

Forest Service Botanist, and Wildlife and Fisheries Biologists determined the proposed actions will have no significant effects or impacts on species listed as federally threatened, endangered or proposed to be listed, or on Forest Service Sensitive plant, wildlife or fish species. There are no known occurrences of Threatened, Endangered, or Sensitive plant species in the project area, nor is suitable habitat likely to occur. The Forest consulted with the US Fish and Wildlife Service and the National Marine Fisheries Service, using the 2015 Idaho Habitat Restoration Programmatic biological opinion, and determined that any effects to threatened or endangered fish and terrestrial wildlife species and their habitats would be limited, due to project timing, mitigations, and best management practices.

Canada lynx, bull trout, steelhead trout, westslope cutthroat trout, interior redband trout, flammulated owl, fisher, long-eared and long-legged myotis, Townsend's big-eared bat, North American wolverine, and Western (boreal) toad and their habitats may be adversely affected, though project activities would not likely result in a loss of viability, nor cause a trend to federal listing or a loss of species viability range wide. The project would have long-term benefits for listed and sensitive fish species, fisher, North American wolverine and Western (Boreal) toad. Project activities and design criteria will comply with all conditions in both the fisheries and wildlife "Programmatic".

Based on the above assessment, no effects exist that will cause an incremental cumulative effect and no extraordinary circumstances were identified for these resources. For the complete analyses, see the Biological Assessments and Evaluations and specialists' reports in the project record.

2. Floodplains, wetlands or municipal watersheds

No designated municipal watersheds exist in the project area, thus there will be no effects to municipal watersheds. The proposed activities will not modify or occupy floodplains to an extent greater than already exists. The project does not propose to adversely modify or destroy wetlands. The restoration of soil and hydrologic processes will provide positive effects on floodplains and wetlands in the project area.

The proposed project is also consistent with all applicable State and Federal water quality laws because project design criteria and best management practices (BMPs) have been included to protect water resources.

The activities are consistent with soil and water standards in the Clearwater National Forest Plan, including the PACFISH amendment. Therefore, no direct or indirect effects that will cause a cumulatively significant effect to water quality of streams within the area; downstream waters; or resources in floodplains, wetlands, and municipal watersheds are anticipated.

Based on this analysis, no extraordinary circumstances were identified regarding the effects to water quality of streams within the area; downstream waters; or resources in floodplains, wetlands, and municipal watersheds; thereby complying with EO 11988, EO 11990, and FSH 1909.15 Chapter 31.2.2.

3. Congressionally designated areas, such as wilderness, wilderness study areas or national recreation areas

The project area is not located in any congressionally designated area, and therefore, no extraordinary circumstances were identified to these resources.

4. Inventoried roadless areas or potential wilderness areas

The project area is not located in any inventoried or potential wilderness areas, and therefore, no extraordinary circumstances were identified to this resource.

5. Research Natural Areas

The project area is not located in any research natural area, and therefore, no extraordinary circumstances were identified to this resource.

6. American Indians and Alaska native religious or cultural sites

Because of previous adequate inventory; or the type, location or nature of the undertaking, the Forest Cultural Resource Specialist has determined the above project has little likelihood to adversely affect historic properties. As a result, a *No Inventory Decision* has been made and therefore, no extraordinary circumstances were identified to this resource.

7. Archaeological sites or historical properties or areas

The Idaho State Historic Preservation Officer, or the Forest Archaeologist via the use of the North Idaho Programmatic Agreement, has determined that no archaeological or historic property will be adversely affected by this project. Therefore, no extraordinary circumstances were identified to these resources.

IV. Interested and Affected Agencies, organizations, and Persons Contacted

On December 17, 2015, letters providing information and seeking public comment were mailed to individuals, organizations, state and local agencies, and the Nez Perce and Coeur d'Alene Tribes. Project information was also made available at http://prdp2fs.ess.usda.gov/Internet/FSEDOCUMENTS/stelprd3833727.pdf.

Four individuals/organizations commented during the public comment period, and their comments are addressed in Appendix A.

V. Findings Required by Other Laws

Based on my review of the actions associated with this project, I find that the South Brushy Fork Non-System Road Decommissioning Project is consistent with applicable Federal laws and regulations.

National Forest Management Act and Nez Perce National Forest Plan: The actions are consistent with the Nez Perce National Forest Plan (USDA Forest Service 1987, as amended), as required by the National Forest Management Act of 1976. In addition, design features and mitigation measures ensure compliance with the act.

PACFISH/INFISH Riparian Habitat Conservation Areas (RHCAs): All activities associated with the project comply with direction regarding PACFISH and RHCAs.

Endangered Species Act: A Forest Service Fish Biologist, Wildlife Biologist, and Botanist evaluated the proposed action with regard to the Endangered Species Act as documented in the Biological Assessments, Biological Evaluations, and specialist's reports, and determined this project is consistent with the Endangered Species Act.

Clean Air Act: This project will comply with the provisions of the Clean Air Act, and the rules, regulations, and permit procedures of the Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (IDEQ). No prescribed burning or other activity with the potential to significantly affect air quality is proposed.

Clean Water Act and State Water Quality Laws: The Interdisciplinary Team Hydrologist has determined this project complies with the Clean Water Act, and state and federal water quality laws because it will have no notable effects to the water quality of area or downstream waters.

Migratory Bird Treaty Act: This project complies with the Migratory Bird Treaty Act since it will result in no substantial loss of migratory bird habitat, nor will there be any measurable impact(s) on Neotropical migratory bird populations as a whole.

The project complies with the U.S. Fish and Wildlife Service Director's Order #131 related to the applicability of the Migratory Bird Treaty Act to federal agencies and requirements for permits for "take." In addition, the project complies with Executive Order 13186 because the analysis meets agency obligations as defined under the January 16, 2001 MOU between the Forest Service and U.S. Fish and Wildlife Service designed to complement Executive Order 13186.

National Historic Preservation Act: A cultural resource records search has been conducted for this project. Based on the project description a "*No Inventory Decision*" has been made for this project per stipulation V(A) of the North Idaho Cultural Resource Programmatic Agreement. Therefore, this project meets the agency's responsibilities under the National Historic Preservation Act (16 USC 470), as amended, and is consistent with the *Programmatic Agreement between the Idaho State Historic Preservation Officer, the Advisory Council on Historic Preservation and the Region 1 National Forests in Northern Idaho Regarding the Management of Cultural Resources.*

American Indian Treaty Rights: The Nez Perce Tribal Government Liaison and the Nez Perce Tribe reviewed the project and determined the proposed action will not affect Nez Perce Tribe Treaty rights or Nez Perce Tribal members' abilities to exercise those rights.

Environmental Justice: The actions associated with this project will not disproportionately impact consumers, Native American Indians, women, low-income populations, other minorities or civil rights of any American Citizen in accordance with Executive Order 12898. No disproportionate impacts to minority or low-income populations were identified during scoping or the effects analysis.

Prime Farm Land, Range Land, and Forest Land: The actions associated with this project comply with the Federal Regulations for prime land. The definition of "prime" forest land does not apply to lands within the National Forest System. The project area does not contain any prime range land or farm land. Federal lands will be managed with appropriate sensitivity to the effects on adjacent lands.

Energy Requirements: No unusual energy demands are required to implement the proposed actions.

Other Laws or Requirements: The actions associated with this project are consistent with all other Federal, State or local laws or requirements for the protection of the environment and cultural resources.

VI. Contact Person

Questions regarding this decision should be sent to Jeff Chynoweth, Small NEPA Team Coordinator, c/o Nez Perce-Clearwater NFs Supervisor's Office, 903 Third Street, Kamiah, Idaho 83536; 208-935-4260 or FAX 208-935-4275.

VII. Signature of Deciding Officer

4/5/2016

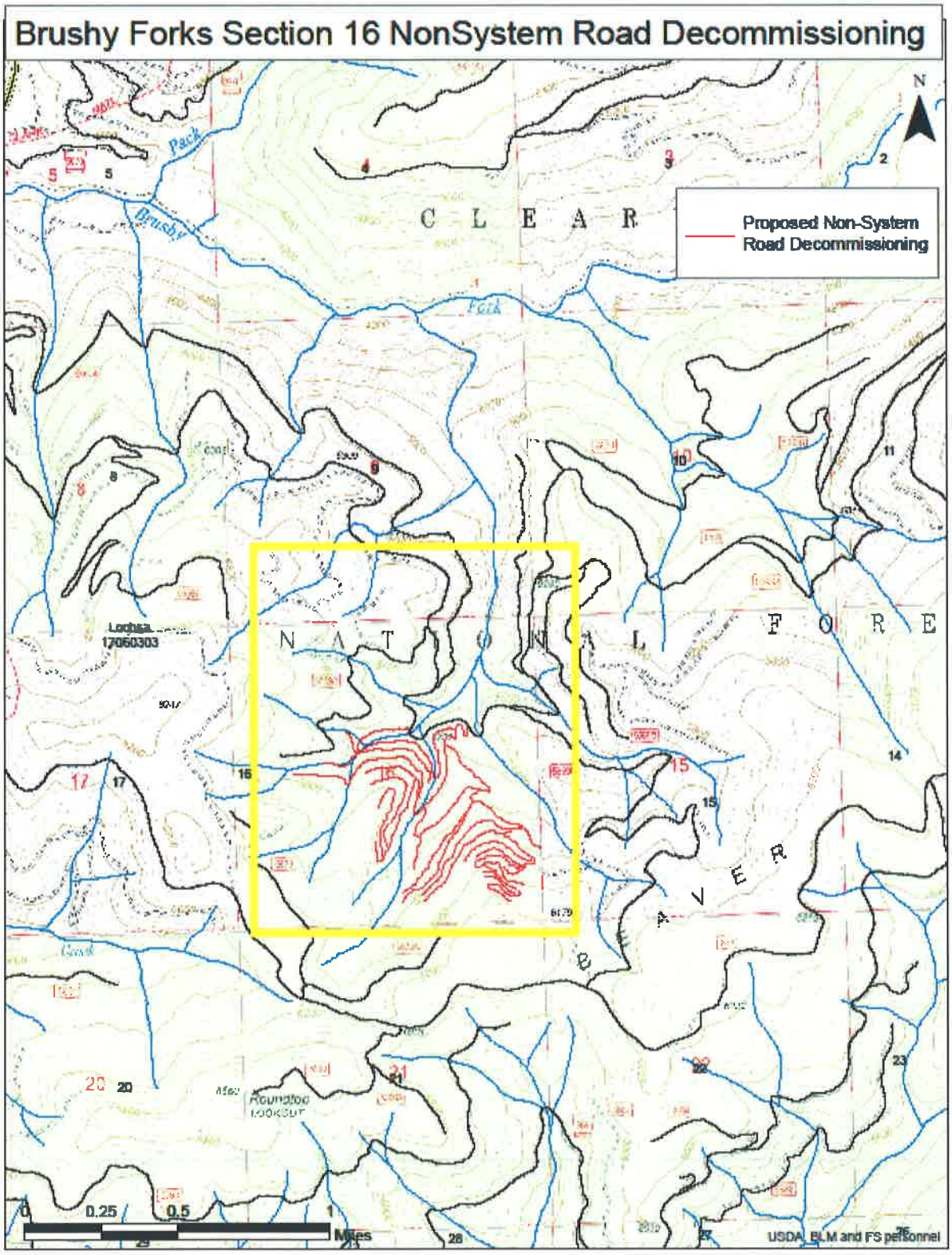
BRANDON KNAPTON
District Ranger

Date

cc: Taylor Greenup

Enclosure (1): Map

Map of South Brushy Fork Non-System Road Decommissioning Project



Appendix A

Analysis of Scoping Comments

South Brushy Fork Non-System Road Decommissioning Project

Four letters specific to this project were received during the scoping period of December 17, 2015 to January 29, 2016. The letters were analyzed and an analysis code assigned to the comments (see Table 1).

Comment Analysis Codes

1: Outside the scope of the proposed action.
2: Already decided by law, regulation, Forest Plan, or other higher level of decision.
3: Irrelevant to the decision to be made.
4: Conjectural and not supported by scientific evidence.
5: General comment, suggestion, opinion, or position statement.
6: Other agency or partner's consultation, review, advice, recommendation(s), etc.
7: Already considered in the proposed action or is standard procedure.

Codes 1 – 6 are standard codes. Comments assigned to these codes are considered to be non-significant issues. Code 7 was added as a category for those suggestions that are already proposed or for procedures that are routinely done.

Table 1: Comment Analysis

Commenter	Comment	Disposition
Gary Mcfarlane Friends of the Clearwater	The agency needs to publish the monitoring results of past similar projects to make certain that negative impacts truly fit within a CE.	2, 5; also see Response 1 below
	Since the area is already revegetated...we are concerned that such extensive work, though intended to reduce erosion, may cause more erosion.	5, 7
	One [option] would be remove all culverts and recontour the immediate area of the culverts.	7
	That could be combined with a less aggressive vegetation removal option, which would recontour only in areas of the roads where erosion is taking place. [Both] options would best be evaluated in an EA.	5; also see Response 2 below
	The removal of non-system roads, though important, does [not] address the issue of too many system roads. Simply put, there are far too many roads on the Nez Perce and Clearwater National Forests. The number of these...projects would not be needed if the agency truly adopted a minimum road system and then removed barriers on roads that would be decommissioned.	1, 5

Commenter	Comment	Disposition
Brad Smith, Idaho Conservation League	The Idaho Conservation League supports this project and appreciates the ecological benefits that will be realized as a result of its implementation.	Thank you for your comment
Bernie Hermann Lewis-Clark ATV Club Inc.	It would be better to look at making a loop OHV trail system on some of those roads or place them in long-term storage.	See Responses 2 and 3 below
Rod Parks	I am not supportive of this project. I have walked many miles of similar roads...and I have never witnessed a slide...that has extended beyond the road grade. The road grade creates a natural area to stop major slides, especially when the road is vegetated.	5
	[R]e-opening one of these roads could possibly stop a fire from turning into another major forest fire event.	5
	[T]he project would create more sediment in streams for many years before any benefits from the project.	5, 7
	The map shows tiered roads. There is potential for massive slides if a substantial rain event occurs before the tiered roads are re-vegetated naturally.	5
	These roads are often used for game travel that could affect game negatively if removed.	5
	An alternative...would be to only remove the culverts and re-establish the grade of the stream. No road decommissioning beyond the last culvert on any road. Only decommissioning the first five hundred meters from national forest system roads to discourage motorized use.	See Response 2 below

Forest Service Response

Response 1: Road decommissioning methods used on the Forest, which includes monitoring and feedback to incorporate best available practices, are based on an established program used since the mid-1990s. Refer to the 1992 - 2009 Clearwater National Forest Annual Monitoring Reports (available at http://www.fs.usda.gov/detail/nezperceclearwater/landmanagement/planning) for a summary of the methods, annual accomplishments and monitoring of effects (1999 – 2009).

Response 2: The purpose of this project is to reduce adverse impacts to the watershed from roads determined no longer necessary for the Forest's transportation system. By decommissioning and restoring these non-system roads to their expected ecological conditions, the project will help meet Clearwater National Forest Plan objectives and management direction for wildlife and fish habitat, soil productivity, water quality, and protecting and improving watershed, wetland, and riparian resources.

In a published study on the effectiveness of road abandonment vs. road recontouring on the Clearwater National Forest for restoring ecological and hydrological systems, Lloyd et al. (2013) concluded that recontouring, as proposed in this project, significantly increases the recovery of

the road's forested/ecological condition when compared to allowing recovery to occur naturally over time. Specifically Lloyd states that "[R]esource managers often use restoration of aboveground vegetation structure as the criterion for restoration success. In our study, the trajectory of plant succession on abandoned roads and recontoured roads followed similar trends to other research conducted on passively restored roads, although our data suggest that vegetation succession to shrubs and trees may be slower on abandoned roads as compared with recontoured roads. However, ecosystem recovery belowground differed markedly from that aboveground ... [O]ur study showed that recontouring increased SOM [Soil Organinc Matter], TC [Total Carbon], and TN [Total Nitrogen] pools to levels similar to those of never-roaded sites, while TC and TN pools remained low along abandoned roads. Soil organic matter is a key ecosystem property that exerts control on secondary succession, water-holding capacity, hydraulic properties, and nutrient dynamics. Research quantifying accumulation rates of SOM following disturbance indicates that it can take thousands of years for SOM to accumulate to steady-state levels, particularly in forested ecosystems. In this context, our research suggests that active recontouring can dramatically accelerate the recovery of soil properties by hundreds to thousands of years, as compared with never-roaded reference areas. In contrast, belowground properties and processes along abandoned roads remain in a degraded state even 30 or more years after road closure and revegetation."

Lloyd R.A., Lohse K.A., and Ferré. 2013. Influence of road reclamation techniques on forest ecosystem recovery Frontiers in Ecology and Environment, Vol. 11(2): 75–81.

Response 3: The non-system roads included in this project are part of legacy timber harvests that occurred in the 1960s. The roads were built originally to facilitate 'jammer logging' with closely spaced roads and numerous stream crossings with log culverts. This type of road system does not lend itself to the creation of a usable "OHV loop trail" because it is a stack of short roads within a former harvest area. It would not be practical to store the road system as that would require opening and re-building a good portion of the roads, defeating the purpose and need of decommissioning and restoring the roads.